Pre-Engineered Metal Building Permits Options for Plan Review/Inspections Process

June 8, 2007

On April 20, 1999, the Department issued a process/policy addressing submittal requirements for pre-engineered metal buildings. We've recently reviewed that process/policy with affected customers, resulting in some minor revisions, including another option for anchor bolt setting plans and summary reactions (see item B6). As with the original process/policy, the overall intent is to promote a strategy to address customers' needs for timely plan review and permit issuance while at the same time assuring both plan submission and field construction are Code compliant. This version of the Pre-Engineered Metal Buildings Process continues the "Two-Option" approach, allowing customers to choose the method of submission which is most appropriate for their project. The Options are as follows:

Option "A"

- **A.1** This Option will allow permit application of pre-engineered metal buildings either as phased construction or as a complete package, when the final applicable design drawings are submitted
- **A.2** Applicants may continue to obtain full building or fast-track staged construction permits that are presently available.
- **A.3** The following summarizes the drawing/calculation requirements for the phased permit:
 - a. Footing/Foundation
 - 1. Anchor bolt setting plan
 - 2. Foundation Plan
 - 3. Summary of Reactions
 - 4. Site Plan
 - 5. Architectural Plans (floor plan and elevations may be for information only)
 - 6. PME Plans (for slab utilities)
 - b. Structural Shell
 - 1. All of the Above
 - 2. Structural framing plans
 - 3. Final architectural plans pertaining to the shell
 - c. Upfit permit
 - 1. Complete architectural plans
 - 2. Complete PME plans
 - 3. Fire-protection Plans
- A.4 Drawing/calculation requirements for a full building permit



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1. All of A3 above

A.5 Unless otherwise stated, <u>all drawings submitted in **A.3** and **A.4** above shall be marked "for construction".</u>

Option "B"

- **B.1** Projects with NC Licensed Architects or Engineers coordinating the manufacturer's drawings to match the A/E design criteria will be allowed to use a two-part permit application process as described below.
- **B.2** By participating in this voluntary process, the Architect or Engineer accepts responsibility for certify the match between the permit application drawings/design criteria and the manufacturers erection drawings. Architects or Engineers who fail to follow through on this responsibility will be excluded from the Program ("Three strikes and you're out!").
- **B.3** In all cases, a letter from the Architect or Engineer (sealed in the case of the PE), certifying the match between the permit application drawings/design criteria and the manufacturers "for construction" erection drawings, will be required on site at or before the Code Enforcement Official's field inspection of the metal building erection. The certifying letter will be attached to the erection drawings certified "to match" and this will be rolled up with the permit drawings. An extra copy of the certifying letter will be available for the inspector's delivery to Document Control.
- **B.4** The following summarizes the drawing/calculation requirements for each type of permit:
 - a. Footing/Foundation
 - 1. Anchor bolt setting plan marked "for construction"
 - 2. Foundation Plan
 - 3. Summary of Reactions "for construction"
 - 4. Site Plan
 - 5. Architectural Plans (floor plan and elevations may be for information only)
 - 6. PME Plans (for slab utilities)
 - b. Full Building Permit
 - 1. All of the Above
 - 2. Complete architectural plans
 - 3. Complete PME Plans
 - 4. Fire-protection Plans
 - 5. "For Construction" metal building drawings <u>are not required</u> at the permit application; however, they must be on site along with the architect's or engineer's certification letter at the time of the Code Enforcement Official's site visit for inspection.
- **B.5** Where projects include the use of the metal building structure as a supporting element in masonry, brick veneer detailing or other auxiliary loads (cranes, roof mounted equipment, etc.) the following submission criteria shall apply:
 - 1. The project Architect or Engineer will include the design of the masonry and all required detailing in the shell package.
 - 2. The detailing (noted in 1 above) will include all connections and loads transferred to the metal building structure.



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- 3. The metal building manufacturer will submit "preliminary drawings" indicating the design of metal building structural elements supporting masonry detailing and the connection of such detailing to the metal building structure.
- 4. The project Architect or Engineer will certify to the Department's field inspector that the metal building manufacturer's supporting members comply with the design criteria included in the permit application. This certification will be included in the letter noted in **B.3** above.

B.6 Review Sequence: the applicant may elect to exclude item B.4.a.1 (anchor bolt setting plan) and Item B.4.a.3 (Summary of Reactions) on the first or second review cycle. The review will proceed on all other code compliance aspects. Items 1 and 3 must be submitted for review prior to permit issuance. If a third review cycle is required because of this provision alone, there will be no third plan review charge.

